

***ALOE BUHRII*: A NEW SPECIES FROM THE CALVINIA DISTRICT,
CAPE PROVINCE**

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ABSTRACT

A new species of *Aloe* from the Calvinia district of the Cape Province is described. It is considered to be related to *A. striata* Haw.

UITTREKSEL

'n Nuwe *Aloe*-soort uit die Calviniadistrik in die Kaapprovinsie word beskryf. Dit word geag verwant te wees aan *A. striata* Haw.

Aloe buhrii Lavranos nov. sp., affinis *A. striatae* Haw., sed ab ea foliis arcuatis, erectis, marginibus minute denticulatis, inflorescentiis laxe paniculatis, stigmatibus post anthesin a 5 mm exserto satis differt.

Plantae acaules; *foliis* lanceolatis, deltoideis, arcuatis, erectis, vel adscendentibus, a 40 cm longis, 9 cm latis, carnosius supra planis sed apicem versus leviter canaliculatis, subtus convexis, utrinque glaucis, irregulariter maculis albescentibus, elongatis, nonnunquam confluentibus obtectis; marginibus cartilagineis, rubidis, dentibus minutissimis, obolescentibus; *inflorescentiis* laxe paniculatis, a 60 cm altae, 7-15-ramosa, pedunculo valido, basi 12-15 mm lato; *racemis* sub-capitatis, aliquantum laxis, floribus aurantiacis; *bracteis* deltoideis, acutis, 5-10 mm longis; *pedicellis* 20-25 mm longis; *perigoniiis* 25-27 mm longis, basi inflatis et 6 mm diam., supra ovarium a 4 mm constrictis, deinde decurvulis, orem versus paulo dilatatis, segmentibus exterioribus per 6-7 mm liberis; *filamentis* valde applanatis, tractu temporis a 3 mm exsertis; *stigma* post anthesin a 5-6 mm exsertum; *ovarium* viridulum, 5 mm longum, 2 mm latum.

Type Locality: South Africa: Cape Province;—3119 (Calvinia). Isolated hills, 6 km E of the Bokkeveld Plateau, (-AA) alt. appr. 650 m, *Buhr in Lavranos 8163* (PRE holotype).

Plants stemless dividing into several heads, the rosettes usually upright; *leaves* about 16, lanceolate-deltoid, arcuate-erect or ascending, 40 cm long, 9 cm broad at base, fleshy, rather soft, their upper surface flat but slightly canaliculate towards the apex, glaucous, reddish tinged, distinctly striate and covered irregularly but in parts densely with pale, elongate or "H"-shaped and often confluent

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Plant flowering at Zwartkops, Transvaal.



Detail of the inflorescence



Flowers, natural size.

FIG. 1. *Aloe buhrii* Lavranos.

Photos: H. Bornman

spots; their lower surface convex, otherwise as the upper; the margins with a pale red, cartilaginous, denticulate or sub-entire border, 1,5—2,0 mm wide, the denticles obtuse, less than 1 mm long, usually 3,5 mm distant but often laterally confluent; *inflorescence* laxely paniculate, to 60 cm tall, branching above the middle into 7—15 rather short lateral branches, the lower ones rebranched, each branch or branchlet subtended by a broadly deltoid, yellowish, 5-8-nerved bract; *peduncle* basally biconvex, becoming sub-terete upward, rigid, 12—18 mm broad near its base; *racemes* sub-capitate, rather laxely flowered, the buds green tipped, the flowers orange-red, pendulous at the end of horizontally spreading *pedicels* which are the same colour as the perianths; *floral bracts* very narrowly deltoid, acute, 5—10 mm long, yellowish, 3-5-nerved; *perianths* 25—27 mm long, with a basal swelling 6 mm diam., constricted to 4 mm above the ovary, thence slightly decurved and widening toward the mouth, their outer segments free for 6—7 mm, with 3 congested and apically confluent orange-red nerves, the inner segments broader than the outer; *stamens* with yellow, filiform and much flattened filaments, the anthers in turn exerted by 3 mm; *style* yellow, its stigma at length exerted by 5—6 mm; *ovary* pale green, 5 mm long, 2 mm broad.

A. buhrii has escaped discovery, and perhaps annihilation, because of its seemingly very limited range in an area which is both remote and not directly accessible by road. It is restricted to a few isolated hill tops standing in advance of the Eastern side of the Bokkeveld Plateau, above the Swart Doorns River gorge, where it grows in karroid veld on shales of the Malmesbury system. The average annual rainfall on this side of the Bokkeveld is of the order of 150—200 mm and is confined almost exclusively to the winter months, May to September. The climate is mild in winter with only light frosts, but hot in summer.

Despite its very different appearance, *A. buhrii* is related to *A. striata* and its associates with which it has in common striate leaves with broad, cartilaginous, red margins bearing obsolescent teeth, much branched inflorescences with rather capitate racemes, long pedicels and flowers with a basal swelling and outer segments free for only 6—7 mm. It divides into several rosettes but does not produce suckers.

The new species differs from its relatives by its arcuate-erect or steeply ascending leaves with their denticulate margins, its paniculate (not corymbose) inflorescences, which are much less branched than in *A. karasbergensis* Pillans and the fact that the style becomes exerted by 5 mm or more after anthesis.

The specimen here figured may not be wholly typical where the inflorescence is concerned, as it flowered out of the soil and some of the lateral racemes aborted in consequence.



FIG. 2. *A. buhrii*. Typical group of plants in habitat.

Photo: J.-J. Lavranos

When I first examined these plants and noticed their affinities with the *striata* group of Aloes, I investigated the possibility that they might be of hybrid origin, one of the parents being *A. striata* or *A. karasbergensis*. However, neither of these species is found within a radius of some 250 km of the Bokkeveld. *A. melanacantha* Berger and *A. glauca* Mill. are the only two species which grow in close proximity to the new species while *A. mitriformis* Mill., *A. krapohlana* Marl., *A. khamiesensis* Pillans and *A. dichotoma* Masson occur on or near the Bokkeveld as does *A. falcata* Baker. None of these species is in any sense related to *A. buhrii*.

The species is named after Mr. Elias A. Buhr, of Nieuwoudtville, in the Western Cape Province, who recognised it as new to science and is a keen student and nature conservationist. I am indebted to him for the plants on which this description is based and for most of the information about them. I must thank Mr. Dubois, of Pretoria for conveying to me a plant in bud, a rather delicate operation; also Mr. Bornman for the photographs accompanying this text.